

Crop Salt Tolerances

Crop (name)	Yield loss 0% ECe ¹ ECw ²		Yield loss 10% ECe ¹ ECw ²		Yield loss 25% ECe ¹ ECw ²		Yield loss 50% ECe ¹ ECw ²		Maximum ECe ³
Alfalfa	2.0	1.3	3.4	2.2	5.4	3.6	8.8	5.9	15.5
Almond	1.5	1.0	2.0	1.4	2.8	1.9	4.1	2.7	7.0
Apple	1.7	1.0	2.3	1.6	3.3	2.2	4.8	3.2	8.0
Apricot	1.6	1.1	2.0	1.3	2.6	1.8	3.7	2.5	6.0
Barley	8.0	5.3	10.0	6.7	13.0	8.7	18.0	12.0	28.0
Beans	1.0	0.7	1.5	1.0	2.3	1.5	3.6	2.4	6.5
Beets	4.0	2.7	5.1	3.4	6.8	4.5	9.6	6.4	15.0
Bermuda Grass	6.9	4.6	8.5	5.7	10.8	7.2	14.7	9.8	22.5
Blackberry	1.5	1.0	2.0	1.3	2.6	1.8	3.8	2.5	6.0
Boysenberry	1.5	1.0	2.0	1.3	2.6	1.8	3.8	2.5	6.0
Broccoli	2.8	1.9	3.9	2.6	5.5	3.7	8.2	5.5	13.5
Cabbage	1.8	1.2	2.8	1.9	4.4	2.9	7.0	4.6	12.0
Cantaloupe	2.2	1.5	3.6	2.4	5.7	3.8	9.1	6.1	16.0
Carrot	1.0	0.7	1.7	1.1	2.8	1.9	4.6	3.1	8.0
Clover	1.5	1.0	2.3	1.6	3.6	2.4	5.7	3.8	10.0
Corn, Grain & Silage	1.7	1.1	2.5	1.7	3.8	2.5	5.9	3.9	10.0
Corn Silage	1.8	1.2	3.2	2.1	5.2	3.5	8.6	5.7	15.5
Corn, Sweet	1.7	1.1	2.5	1.7	3.8	2.5	5.9	3.9	10.0
Cotton	7.7	5.1	9.6	6.4	13.0	8.4	17.0	12.0	27.0
Cucumber	2.5	1.7	3.3	2.2	4.4	2.9	6.3	4.2	10.0
Fescue, Tall	3.9	2.6	5.8	3.9	8.6	5.7	13.3	8.9	23.0
Grape	1.5	1.0	2.5	1.7	4.1	2.7	6.7	4.5	12.0
Lettuce	1.3	0.9	2.1	1.4	3.2	2.1	5.2	3.4	9.0
Love Grass	2.0	1.3	3.2	2.1	5.0	3.3	8.0	5.3	14.0
Meadow Foxtail	1.5	1.0	2.5	1.7	4.1	2.7	6.7	4.6	12.0
Onion	1.2	0.8	1.8	1.2	2.8	1.8	4.3	2.9	7.5
Orchard Grass	1.5	1.0	3.1	2.1	5.5	3.7	9.6	6.4	17.5
Peach	1.7	1.0	2.2	1.4	2.9	1.9	4.1	2.7	6.5
Pear	1.7	1.0	2.3	1.6	3.3	2.2	4.8	3.2	8.0
Pecan ⁴	1.9	1.3**	2.4*	1.6**	3.2*	2.4**	4.6	3.0**	8.0*
Pepper	1.5	1.0	2.2	1.5	3.3	2.2	5.1	3.4	8.5
Potato, Irish	1.7	1.1	2.5	1.7	3.8	2.5	5.9	3.9	10.0
Potato, Sweet	1.5	1.0	2.4	1.6	3.8	2.5	6.0	4.0	10.5
Radish	1.2	0.8	2.0	1.3	3.1	2.1	5.0	3.4	9.0
Raspberry	1.0	0.7	1.4	1.0	2.1	1.4	3.2	2.1	5.5
Ryegrass, Perennial	5.6	3.7	6.9	4.6	8.9	5.9	12.2	8.1	19.0
Safflower	5.3	3.5	6.2	4.1	7.6	5.0	9.9	6.6	14.5
Soybean	5.0	3.3	5.5	3.7	6.2	4.2	7.5	5.0	10.0
Spinach	2.0	1.3	3.3	2.2	5.3	3.5	8.6	5.7	15.0
Strawberry	1.0	0.7	1.3	0.9	1.8	1.2	2.5	1.7	4.0
Sudan Grass	2.8	1.9	5.1	3.4	8.6	5.7	14.4	9.6	26.0
Sugar Beet	7.0	4.7	8.7	5.8	11.0	7.5	15.0	10.0	24.0
Tomato	2.5	1.7	3.5	2.3	5.0	3.4	7.6	5.0	12.5
Trefoil, Big	2.3	1.5	2.8	1.9	3.6	2.4	4.9	3.3	7.5
Trefoil, Birdsfoot	5.0	3.3	6.0	4.0	7.5	5.0	10.0	6.7	15.0
Vetch	3.0	2.0	3.9	2.6	5.3	3.5	7.6	5.0	12.0
Wheat	6.0	4.0	7.4	4.9	9.5	6.4	13.0	8.7	20.0
Wheatgrass, Crested	3.5	2.3	6.0	4.0	9.8	6.5	16.0	11.0	28.5
Wheatgrass, Fairway	7.5	5.0	9.0	6.0	11.0	7.4	15.0	9.8	22.0
Wheatgrass, Tall	7.5	5.0	9.9	6.6	13.3	9.0	19.4	13.0	31.5
Wild Rye, beardless	2.7	1.8	4.4	2.9	6.9	4.6	11.0	7.4	19.5

¹ ECe is the electrical conductivity of saturated soil extract, reported in millimhos per centimeter at 25°C.² ECw is the electrical conductivity of the irrigation water, reported in millimhos per centimeter at 25°C.³ Maximum ECe is the conductivity of saturated soil extract, reported in millimhos per centimeter at 25°C, at which the plant dies.⁴ Complete data is not currently available for pecans. The * is an interpolation between the 0% and 50% range. The ** for ECw is calculated as ECe x 0.67, which is a general rule of thumb for these ratios under average conditions. RDFischer 2/09